



1743
JPM
Patent

Attorney Docket: 302,670-00012

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:
MARK M. WANG, et al.

Serial No.: 09/993,375

Filed: November 14, 2001

For: METHODS FOR INCREASING
DETECTION SENSITIVITY IN OPTICAL
DIELECTRIC SORTING SYSTEMS

Group Art Unit: 1743

Examiner: Not Yet Assigned

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R. §§1.97–1.98, information relating to the above–identified application is hereby disclosed. The accompanying Form PTO/SB/08A provides a listing of documents that may be relevant to the subject application.

It is requested that the Examiner fully consider the art cited in the accompanying Form PTO/SB/08A, initial the left–most column of the form adjacent each cited reference, and return a copy for Applicants' records. It is further requested that the art be cited on the cover of any patent issuing from the subject application.

CERTIFICATE OF MAILING
(37 C.F.R. §1.8a)

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as First Class Mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

5/14/04
Date of Deposit
IR1:1055004.1

Denise Doss

Name of Person Mailing Paper

Signature of Person Mailing Paper

In accordance with §1.97(b), this Information Disclosure Statement is being filed before the mailing of a first Office Action on the merits of the above-identified application, and therefore no fee is required. If a first Office Action has been mailed, then please enter this Information Disclosure Statement and charge Deposit Account No. 50-2862 for any necessary fees.

In accordance with §1.98(d), copies of some or all of the references listed on the attached Form PTO/SB/08A are not enclosed herewith because they were previously cited by or submitted to the Patent and Trademark Office in prior copending or related applications for which a claim for priority under 35 U.S.C. §120 has been made in the instant application. Accordingly, Applicants will provide duplicate copies in respect of the present case only if the Examiner so desires.

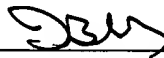
This statement should not be construed as a representation that more material information does not exist or that an exhaustive search of the relevant art has been made. Nor does this statement constitute an admission by Applicants or Applicants' agent that the information provided herein is necessarily prior art to Applicants' invention. Moreover, Applicants reserve the right to establish the patentability of the claimed invention over any of the listed documents should they be applied there-

against as references. Please charge any deficiency or credit any overpayment to Deposit Account
No. 50-2862.

Respectfully submitted,

O'MELVENY & MYERS LLP

Dated: 5/14/04

By: 
David B. Murphy
Reg. No. 31,125
Attorneys for Applicant

DBM/dnd

34263

O'Melveny & Myers LLP
114 Pacifica, Suite 100
Irvine, CA 92618-3315
(949) 737-2900

PATENT TRADEMARK OFFICE

Please type a plus sign (+) inside this box → +

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

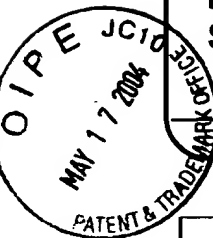
INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet **1** of **2**

Complete if Known

Application Number	09/993,375
Filing Date	November 14, 2001
First Named Inventor	Mark M. Wang
Group Art Unit	1743
Examiner Name	Not Yet Available
Attorney Docket Number	0302670-12 (prev. 265/084)



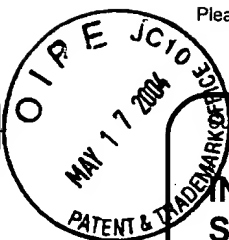
Examiner Initials *	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	Number	Kind Code ² (if known)			
	US-3826899		Ehrlich et al	07/30/1974	
	US-4939081		Figdor et al	07/03/1990	
	US-5374556		Bennett et al	12/20/1994	
	US-5472550		Periasamy	12/05/1995	
	US-5677286		Shull et al	10/14/1997	
	US-5752806		Wilson et al	05/19/1998	
	US-5834208		Sakano	11/10/1998	
	US-5998152		Lynch et al	12/07/1999	
	US-6008010		Greenberger et al	12/28/1999	
	US-6355491	B1	Zhou et al	03/12/2002	
	US-6387331	B1	Hunter	05/14/2002	
	US-6395480	B1	Hefti	05/28/2002	
	US-6408878	B2	Unger et al	06/25/2002	
	US-6411838	B1	Nordstrom et al	06/25/2002	
	US-6485905	B2	Hefti	11/26/2002	
	US-6507400	B1	Pina et al	01/14/2003	
	US-6518056	B2	Schembri et al	02/11/2003	
	US-6534308	B1	Palsson et al	03/18/2003	
	US-6540895	B1	Spence et al	04/01/2003	
	US-6566079	B2	Hefti	05/20/2003	
	US-6624940	B1	Grier et al	09/23/2003	
	US-20020025529	A1	Quake et al	02/28/2002	
	US-2002/0037542	A1	Allbritton et al	03/28/2002	
	US-2002/0181837	A1	Wang et al	12/05/2002	
	US-2003/0008364	A1	Wang et al	01/09/2003	

Examiner Initials *	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ₆
	Office ³	Number ⁴	Kind Code ⁵ (if known)				
	WO	02/39104	A1	Kibar	05/16/2002		

Examiner Initials *	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	ARLT et al, "Moving Interference Patterns Created Using The Angular Doppler Effect", Optics Express, 10, 16, 2002, 844-852.	
	ASHKIN, "The Pressure Of Laser Light", Scientific American, 226, 2, 1972, 63-71.	
	BUICAN, "Automated Cell-Separation Techniques Based On Optical Trapping", ACS Symposium Series, 464, 1991, 59-72.	

IR1:1052372.1

5/4/04



Please type a plus sign (+) inside this box → +

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
Substitute for form 1449A/PTO		Application Number		09/993,375	
		Filing Date		November 14, 2001	
		First Named Inventor		Mark M. Wang	
		Group Art Unit		1743	
		Examiner Name		Not Yet Available	
		Attorney Docket Number		0302670-12 (prev. 265/084)	
Sheet	2	of	2		

Examiner Initials *	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume–issue number(s), publisher, city and/or country where published.	T ²
	DHOKALIA et al, "Optical Tweezers: The Next Generation", Physics World, October 2002, 31-35.	
	GROVER et al, "Automated Single-Cell Sorting System Based On Optical Trapping", Journal of Biomedical Optics, 6, 1, January 2001, 14-22.	
	MACDONALD et al, "Trapping & Manipulation Of Low Index Particles In A Two Dimensional Interferometric Optical Trap", Optics Letters, 26, 12, 2001, 863-865.	
	MARKX et al, "The Dielectrophoretic Levitation Of Latex Beads, with Reference To Field-Flow Fractionation", Journal Of Physics D: Applied Physics, 30, 17, 1997, 2470-2477.	
	MOLLOY et al, "Lights, Action: Optical Tweezers", Contemp. Physics, 43, 4, 2001, 241-248.	
	MOLLOY et al, "Optical Tweezers In A New Light", J. Modern Optics, 50, 10, 2003, 1501-1507.	
	PRIEVE, "Use Of Optical Forces To Detach Single Microscopic Particles Adhering To Flat Surfaces In Aqueous Media", Proceedings of the Annual Meeting of The Adhesion Society, 20 th , 1997, 151-153.	
	ZEMENEK et al, "Optical Trapping Of Rayleigh Particles Using A Gaussian Standing Wave, Optics Communication, 151, 4, 5, 6, 1998, 273-285.	

Examiner Signature	Date Considered
-----------------------	--------------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.